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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/759,220

01/16/2001

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7590 05/12/2008  
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EXAMINER

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ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

05/12/2008

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* KEIICHI HAYASHI

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Appeal 2008-1180  
Application 09/759,220  
Technology Center 2600

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Decided: May 9, 2008

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Before KENNETH W. HAIRSTON, ROBERT E. NAPPI, AND KARL D.  
EASTHOM, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-14. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

## STATEMENT OF THE CASE

Appellant's invention relates to a mobile communications terminal equipped with a browser function for fetching melody data from a server and a tone generator to generate tones based on tone information contained in the melody data. (Spec. 2).

Claim 1 is representative of the claims on appeal:

1. A mobile communication terminal equipped with an Internet browser function, comprising:

means for fetching melody data from a web-based server apparatus by using said browser function; and

tone setting means that generates ringing tones by using tone information contained in said melody data.

The Examiner relies on the following prior art references:

Yoshino	US 6,308,086B1	Oct. 23, 2001
Lin	US 6,366,791B1	Apr. 2, 2002

1. Claims 1-3 and 8-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lin.
2. Claims 4-7 and 11-14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the collective teachings of Lin and Yoshino.

Rather than repeat the arguments of Appellant or the Examiner, we refer to the Briefs and the Answer for their respective details.<sup>1</sup> In this

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<sup>1</sup> We refer to the Appeal Brief filed December 26, 2006 ("App. Br."), the Reply Brief filed June 25, 2007 ("Reply Br."), and the Examiner's Answer mailed April 25, 2007 ("Ans.").

decision, we have considered only those arguments actually made by Appellant. Arguments which Appellant could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

#### FINDINGS OF FACT (FF)

1. Appellant describes conventional mobile terminals that play a melody according to ring tone patterns stored in a memory wherein tone-related data is stored in the memory. The “number of tones that can be expressed is limited by memory capacity.” (Spec. 1: 19-26).

2. In Appellant’s system, after downloading melody data from a Web server, “[t]he melody data (incoming ring tone patterns) thus delivered is stored in memory 13 . . . of the portable telephone 1 and the data is used for sounding an incoming ring tone based on user settings . . .” (Spec. 5: 21-30).

3. Lin’s system delivers to a telephone 20 from the Internet 35, calculated ring tone patterns 65 (using calculation logic 80 and ringing tone logic 75 located at a web page 45 accessed via a web server 40) of selected music scores 55 to generate the ring tone patterns (Fig. 4; col. 3, ll. 8-46; col. 4, ll. 39-55).

#### OPINION

##### *The Anticipation Rejection*

We first consider the Examiner’s anticipation rejection of claim 1 over Lin. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every

element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984); *W.L. Gore and Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554 (Fed. Cir. 1983).

The Examiner's determination that Lin meets the claim (Ans. 3) is disputed by Appellant who argues that Lin does not disclose: "tone setting means that generates ringing tones by using tone information contained in said melody data." (App. Br. 12). The Examiner's position regarding the disputed limitation is that Lin's mobile telephone 20 provides ringing tones (corresponding to a selected musical score) from downloaded melody data containing tone patterns (Ans. 3).

Appellant's response to the Examiner's position is as follows: "the tone information/data in Lin that is used to generate the tones is contained in the mobile station 20 and is not fetched from the server. This is different than the claims. In the claimed invention, the tone setting means generates tones by using tone information that has been fetched from the server." (Reply Br. 4).

We are not persuaded by Appellant's argument for two reasons. First, Appellant's argument is not commensurate with the claim scope. The claim does not require "tone information that has been fetched from the server," and the claim does not preclude tone information from being added to the melody data after the melody data has been fetched from the server. Second, assuming *arguendo* that the claim requires what Appellant argues, the

melody data fetched from Lin's server contains tone information within the downloaded tone patterns corresponding to a musical score (*see* FF 3, Fig. 4). In particular, the melody data 65, specified for each musical score 55, has tone information as follows: pattern data ("X - A - 3 - 3 - 2. . ."), tone data ("X", "A", etc.), and timing data ("-", "- -", "- - -", "- - - -", etc.) (Fig. 4, col. 4, ll. 56-63).<sup>2</sup> Appellant does not specify what the claimed "tone information" is that distinguishes it from Lin. We have searched the Specification for that limitation and are unable to determine what the term encompasses, apart from the meaning we impart as contained in Lin's melodies.

During oral argument, in response to our inquiry as to what "tone information" constitutes, Appellant's counsel stated that "tone information" allows all tones in a melody to be played even when a telephone does not have a stored tone corresponding to all tones in the downloaded melody. In other words, as we understand the argument, if there are extra tones in the melody data from the server, such as "A flat," the user's telephone will be able to play the tone, based on the "tone information," even when the telephone otherwise does not have the ability to generate that specific flat tone. Whether or not this distinction is supported by the Specification need not be determined here, because it is not claimed, nor does it create a claimed distinction. That is, assuming *arguendo* that Lin's telephone were

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<sup>2</sup> The generated melody data 65, generated by calculation logic 80 and ringing tone logic 75 with the musical score 55 (and fetched from web-based server 40), also have information associated with the logic which we determine also constitutes tone information. (*See* FF 3).

limited to a specified number of downloaded tones for each melody, and is thus unable to play other tones in that melody, the tone setting means, using the tone information in melody data 65 as described *supra*, “generates ringing tones by using tone information contained in said melody data” thereby meeting the claim.

Moreover, Appellant states that in his disclosed invention “the tone generator 17 fetches tone data (*tone information*), *that is, incoming ring tone patterns*, which has been delivered from the Web server 2 and stored in memory.” (App. Br. 7) (emphasis supplied). This statement, and Appellant’s admission that Lin “may download a [sic] pattern tones that should be used (tone X, then tone A, then tone B, etc.)” (App. Br. 12), bolsters our determination that Lin’s ring tone patterns constitute tone information meeting the claim.

For the foregoing reasons, independent claim 1 is fully met by Lin. We will therefore sustain the Examiner’s anticipation rejection of that claim.

We will also sustain the Examiner’s rejection of claims 2-3 and 8-10 which were not separately argued and therefore fall with claim 1. *See In re Nielson*, 816 F.2d 1567, 1572 (Fed. Cir. 1987); *see also* 37 C.F.R. § 41.37 (c)(1)(vii).

#### *The Obviousness Rejections*

We now consider the Examiner’s obviousness rejection. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner

must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

If the Examiner's burden is met, the burden then shifts to the Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

With respect to claims 4-7 and 11-14, Appellant argues that the combination of Lin and Yoshino does not render obvious the claim 4 limitation of "performing a modulation processing based on said tone information contained in said data" (App. Br. 13, *see also* App. Br. 14, Reply Br. 4-5). We first note that claims 6 and 13 do not require that limitation, so, Appellant's argument is not commensurate in scope with those claims.

As to claim 4, which we take as representative of the group argued, Appellant first argues that "[b]ecause the tone information is already contained in the Lin mobile station and is not fetched from the server, there would be no need to extract audio information from the fetched data and then perform modulation processing." (App. Br. 14). We have already determined *supra* that the factual predicate for this argument is unsupported. That is, tone information is fetched from Lin's server. Therefore, this argument must fail.

Appellant's final argument regarding claim 4 is that "Yoshino may generate scales (a series of musical notes), but does not modulate tones."



(App. Br. 14). This argument is not commensurate in scope with claim 4. Claim 4 requires “wherein said tone setting means generates ringing tones by performing a modulation processing based on said tone information contained in said melody data.” The claim does not require tone modulation. The claim does not specify what, if anything, is modulated. It only specifies that modulation processing occurs. Appellant’s implied argument that modulation processing is limited to tone modulation is not persuasive. We determine that the claim allows for modulation processing to occur on scales, which we infer from Appellant’s argument, is conceded to occur in Yoshino. Moreover, modulating a scale necessarily includes modulating at least some of the tones in the scale.<sup>3</sup>

We also adopt the Examiner’s unchallenged determinations that extracting audio signal frequencies, or controlling the rhythm of a melody, are forms of modulation processing (Ans. 6-7; and 8-9: par. II). Moreover, “modulation processing” is broad enough to encompass many types of processing prior to or after modulation. Processing scales, which contain tones, for audible output, therefore meets the claim (*see* Yoshino, col. 4, ll. 1-11; Fig. 2) (the digital data must be processed into audio energy tones and therefore different tones must be modulated). Yoshino’s rhythm processing

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<sup>3</sup> We interpret Appellant’s statements, without more, that Yoshino’s “tone” is not equivalent to Appellant’s “tone” (App. Br. 14, Reply Br. 4) to be based on the argument that a scale and tone are different. We are otherwise unable to determine why Appellant maintains that the claimed “tones” are different from Yoshino’s tones. Every melody has tones, including Yoshino’s and Lin’s.

is another form of modulation meeting the claim (*see* Ans. 7; and 8-9: par. II); i.e., it is a type of phase modulation because the timing of tones in a specified music pattern is shifted in accordance with the specified rhythm (*see* Yoshino col. 2, ll. 50-55; col. 5, ll. 45-54).<sup>4</sup>

Based on the arguments of Appellant, we are unable to determine error in the Examiner's conclusion of obviousness.<sup>5</sup> Accordingly, claims 4, 6 and 13 are met by the combination of Lin and Yoshino. We will therefore sustain the Examiner's rejection of those claims.

We will also sustain the Examiner's rejection of claims 5, 7, 11, 12, and 14 which were not separately argued and therefore fall with claim 4.

#### DECISION

We have sustained the Examiner's rejections with respect to claims 1-14. Therefore, the Examiner's decision rejecting claims 1-14 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

#### AFFIRMED

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<sup>4</sup> Yoshino teaches that such processing saves memory space and allows a user to variably alter the tempo/rhythm as desired for each melody since the timing information is not contained in the memory with the scale/tone information (col. 5, ll. 45-54).

<sup>5</sup> Appellant's general allegations that Lin fails to disclose all the claim limitations and that there is no suggestion or motivation to modify Lin (App. Br. 13), do not rise to the level of argument asserting an error in the Examiner's determination. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appeal 2008-1180  
Application 09/759,220

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